

(2)

AD-A143 991



# AIR COMMAND AND STAFF COLLEGE

## STUDENT REPORT

ANALYSIS OF THE BATTLE OF IWO JIMA

MAJOR CHARLES F. SPRIETSMAN

84-2470

*"insights into tomorrow"*

DTIC  
ELECTE  
AUG 8 1984

B

DTIC FILE COPY

### DISTRIBUTION STATEMENT A

Approved for public release;  
Distribution Unlimited

84 08 08 085

## DISCLAIMER

The views and conclusions expressed in this document are those of the author. They are not intended and should not be thought to represent official ideas, attitudes, or policies of any agency of the United States Government. The author has not had special access to official information or ideas and has employed only open-source material available to any writer on this subject.

This document is the property of the United States Government. It is available for distribution to the general public. A loan copy of the document may be obtained from the Air University Interlibrary Loan Service (AUL/LDEX, Maxwell AFB, Alabama, 36112) or the Defense Technical Information Center. Request must include the author's name and complete title of the study.

This document may be reproduced for use in other research reports or educational pursuits contingent upon the following stipulations:

-- Reproduction rights do not extend to any copyrighted material that may be contained in the research report.

-- All reproduced copies must contain the following credit line: "Reprinted by permission of the Air Command and Staff College."

-- All reproduced copies must contain the name(s) of the report's author(s).

-- If format modification is necessary to better serve the user's needs, adjustments may be made to this report--this authorization does not extend to copyrighted information or material. The following statement must accompany the modified document: "Adapted from Air Command and Staff Research Report (number) entitled (title) by (author)."

-- This notice must be included with any reproduced or adapted portions of this document.



**REPORT NUMBER** 84-2470

**TITLE** ANALYSIS OF THE BATTLE OF IWO JIMA

**AUTHOR(S)** MAJOR CHARLES F. SPRIETSMA

**FACULTY ADVISOR** LTCOL DONALD M. MC VAY, ACSC/EDOWA

**SPONSOR** MAJOR JOHN W. DOROUGH, JR., ACSC/EDCJ

Submitted to the faculty in partial fulfillment of  
requirements for graduation.

AIR COMMAND AND STAFF COLLEGE  
AIR UNIVERSITY  
MAXWELL AFB, AL 36112

**DISTRIBUTION STATEMENT A**

Approved for public release  
Distribution Unlimited

**DTIC**  
**ELECTE**  
**AUG 8 1984**

**B**

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER 84-2470	2. GOVT ACCESSION NO. AD-A143991	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle)  ANALYSIS OF THE BATTLE OF IWO JIMA		5. TYPE OF REPORT & PERIOD COVERED
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s)  Charles F. Sprietsma, Major, USMC, [REDACTED]		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS  ACSC/EDCC, MAXWELL AFB AL 36112		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS  ACSC/EDCC, MAXWELL AFB AL 36112		12. REPORT DATE  14 MARCH 1984
		13. NUMBER OF PAGES  57
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report)  UNCLASSIFIED
		15a. DECLASSIFICATION DOWNGRADING SCHEDULE  N/A
16. DISTRIBUTION STATEMENT (of this Report)  STATEMENT "A" <b>DISTRIBUTION STATEMENT A</b> Approved for public release; Distribution Unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)  Presents an analysis of the Battle of Iwo Jima conducted by the United States against the Japanese in February and March, 1945. Applications of the principles of war by each side are analyzed. Sample discussion questions are provided for use during group study of the battle.		

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

## PREFACE

The author has prepared this paper for the Warfare Simulation Branch of Air Command and Staff College, Maxwell AFB, Alabama. It presents an analysis of the Battle of Iwo Jima conducted during February and March, 1945. The paper is organized into three sections as follows:

Section I: Battle Description

Section II: Analysis of the Principles of War

Section III: Discussion Questions

The battle description will set the stage for the main thrust of the paper, the analysis of the principles of war as contained in Air Force Manual 1-1. Finally, the discussion questions, presented in a guided discussion format, can be used to stimulate discussion of the battle and the application of the principles of war.



Accession For	
NTIS GRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

---

## ABOUT THE AUTHOR

---

The author was graduated from the University of Tampa, Florida in June, 1969 and commissioned a second lieutenant in the United States Marine Corps. He was designated a Naval Aviator in February, 1970 and assigned to fly the A-4 Skyhawk. After tours of duty flying the A-4 on the west coast, Viet Nam, and as an instructor pilot in the Naval Air Training Command, he attended the Marine Corps Amphibious Warfare School in 1977. He returned to flight duty with the Second Marine Aircraft Wing in North Carolina. In 1980 he was assigned to the First Battalion, Sixth Marines, Second Marine Division at Camp Lejeune, North Carolina where he served as the Battalion Air Officer and then Battalion Commander. He returned to A-4's in the Second Marine Aircraft Wing in 1981 and served in aircraft maintenance and operations prior to attending the Air Command and Staff College in 1983-84.

## TABLE OF CONTENTS

Preface -----	iii
About the Author -----	iv
List of Illustrations -----	vi
 SECTION I - BATTLE DESCRIPTION -----	 1
Introduction -----	1
Background -----	2
Planning and Preparation -----	4
Assault/Defense -----	8
D-Day -----	8
Capture of Mount Suribachi -----	9
Drive to the North -----	11
Final Phase/Mopping Up -----	13
Results/Summary -----	13
 SECTION II - ANALYSIS OF THE PRINCIPLES OF WAR -----	 15
Introduction -----	15
Objective -----	15
Offensive -----	17
Surprise -----	19
Security -----	20
Mass -----	22
Economy of Force -----	24
Maneuver -----	26
Timing and Tempo -----	27
Unity of Command -----	29
Simplicity -----	31
Logistics -----	32
Cohesion -----	34
Summary -----	36
 SECTION III - DISCUSSION QUESTIONS -----	 37
Introduction -----	37
Questions -----	37

## LIST OF ILLUSTRATIONS

FIGURE 1 - Map of Northwestern Pacific -----	42
FIGURE 2 - Japanese Defense Sectors -----	43
FIGURE 3 - Landing Beaches -----	44
FIGURE 4 - V Amphibious Corps Front Lines on D-Day -----	45
FIGURE 5 - Flag Raising Photography by Joe Rosenthal -----	46
FIGURE 6 - Drive to the North -----	47
FIGURE 7 - Progress of the Attack to the North -----	48



## SECTION I

### BATTLE DESCRIPTION

#### INTRODUCTION

"Among Americans who served on Iwo Island, uncommon valor was a common virtue" (2:158). This statement by Fleet Admiral Nimitz following the Battle of Iwo Jima succinctly summarizes the degree of effort, dedication, and personal sacrifice required of American servicemen to capture the island. The Japanese defenders also displayed these qualities, but the United States forces prevailed because they combined this effort, dedication, and sacrifice with superior application of basic principles of warfighting. Analysis of the application of these principles will help us understand why the battle developed and ended as it did. To do this, we must first examine the battle itself.

The purpose of Section I is to briefly describe the Battle of Iwo Jima. This will be done by describing the perspective from both sides, but primarily concentrating on the American considerations and actions. The description of the battle will begin with a background development to describe the reasons for the assault on/defense of Iwo Jima. Next, the planning and preparation phase will be examined to see how each side planned and organized itself to overcome anticipated problems and conduct the operation. The description will then move to the actual assault/defense phase with a detailed look at how each side carried out its plan

and adjusted to changing situations. Finally, the results of the battle will be examined by comparing the tangible gains to the cost in lives.

#### BACKGROUND

The United States advance during the Pacific campaign had followed a two-pronged approach. General MacArthur's forces had forged northward through the western Pacific and were engaged in the Philippines in 1944. Admiral Nimitz, with Admirals Halsey and Spruance as his operational commanders, had followed a course up the Solomons, Gilberts, Marshalls, and Marianas Islands chains. Securing the Marianas in the summer of 1944 had finally provided the U.S. with bases close enough to the home island of Japan so that long-range bomber missions could be launched against Tokyo.

The Americans wasted little time constructing airfields on Tinian, Saipan, and Guam in the Marianas. B-29 and B-24 missions from there against the Japanese mainland began taking a heavy toll in Japanese lives, industry, and military facilities and equipment. This new capability was a significant improvement, but it was not without danger. The distance from Tinian to Tokyo was 1285 miles (see figure 1), barely within the range capability of the B-29. This posed several problems for the U.S. Army Air Force:

1. Because of the extreme range, any unusual conditions such as battle damage, mechanical problems, or unforeseen headwinds could preclude the safe return of the aircraft.
2. U.S. fighter aircraft were incapable of flying that far so the bombers were arriving over heavily defended targets without fighter protection.

3. Japanese fighters based at Iwo Jima, located halfway between the Marianas and Tokyo, threatened the bombers.

United States leaders realized they needed an enroute base to provide the bombers a divert capability as well as a base from which to launch fighters to escort the bombers all the way to the target. The obvious solution was to capture an island in the Volcano-Bonin chain that extended south from Tokyo (see figure 1). Thorough study revealed Iwo Jima, in the Volcano Island chain, as the only island suitable for airfield development. The Japanese also knew this and had already constructed airfields there and were effectively employing them. Therefore, taking Iwo Jima would not only provide the needed U.S. base, but would eliminate the Japanese fighter threat as well.

In October 1944, the Joint Chiefs of Staff directed the seizure of an advanced base in the Volcano-Bonins and established a target date of 20 January 1945. Admiral Nimitz, as Commander-in-Chief, U.S. Pacific Fleet, determined Iwo Jima was the objective based on the rationale previously discussed. He placed Admiral Raymond A. Spruance in overall command of the operation and designated the force assignments. Admiral Spruance, the force commanders, and their staffs began the exhaustive planning they knew would be required for successful accomplishment of this critical mission.

Meanwhile, the Japanese, recognizing the increasing importance of Iwo Jima, began to fortify the island in earnest in March 1944 under the overall command of Lieutenant General Tadamichi Kuribayashi. General Kuribayashi was one of Japan's most capable and pragmatic military leaders. He was determined that the first pre-war Japanese possession

(Iwo Jima) to be threatened, would not be lost without the greatest possible sacrifice of American lives. To this end, he began his planning and preparations for defending Iwo Jima by calling on his vast reservoir of ingenuity and resourcefulness.

#### PLANNING AND PREPARATION

General Kuribayashi's task of defending Iwo Jima was made easier because of the nature of the terrain which heavily favored defensive operations. It was a volcanic island of seven and one-half square miles. At the southern end was an extinct 556 foot volcano, Mount Suribachi. The island widened to the north into a plateau of gorges, ridges, rocks, and crevices. The entire island was honeycombed with caves, both natural and man-made. The soil composition was rocky and sandy inland and volcanic ash near the beaches. Due to high cliffs or other steeply rising terrain, the only two suitable landing beaches were at the south end of the island on the east and west coasts of the narrow neck of land just north of Mount Suribachi. General Kuribayashi intended to take full advantage of the natural features available to him.

The Japanese had learned some valuable lessons from earlier island defeats and General Kuribayashi did not plan to repeat those mistakes. He decided to concentrate strictly on defensive operations, disdaining the wasteful banzai charges of earlier battles. Instead, he prepared hardened fortifications with mutually supporting fields of fire while using terrain advantages to their fullest. He located most of his defenses in the northern plateau and on Mount Suribachi (see figure 2). Since he knew the Americans would be restricted to the two suitable landing beaches, he could foresee the direction of advance they would

be forced to follow. His plan was simple and called for minimal defense at the shoreline, allowing the enemy to land and then bombarding the congested beach with artillery, rocket, and mortar fire from the north and direct fire from above on Mount Suribachi. Forward observers were stationed on Suribachi to adjust fire from the north. The essence of the entire plan was to defend as long as possible while inflicting maximum casualties on the enemy. General Kuribayashi made this perfectly clear to his staff, "We would all like to die quickly and easily, but that would not inflict heavy casualties. We must fight from cover as long as we possibly can" (7:28). To carry out this plan, General Kuribayashi had to overcome some significant obstacles while reinforcing the island.

One of the serious problems he faced concerned a vagueness of command. The chain of command was quite complicated. There were actually three major units on Iwo Jima, the 109th Division (Kuribayashi), the Second Mixed Brigade (Major General Sadasue Senda), and the Naval Land Force (Rear Admiral Toshinosuke Ichimaru). As senior officer, Kuribayashi was in overall command, but much cooperation among these commanders was required and this would prove to be a problem for him (1:9).

A second major problem he had to overcome was the movement of men and materiel from Japan to Iwo. The Japanese had to accomplish this despite severely limited transport shipping and naval escort and repeated U.S. air and sea interdiction of sea lines of communication. With perseverance and determination, the Japanese were able to amass a formidable force on Iwo Jima prior to the assault. This included: 22,000 troops, 24 tanks, 69 antitank guns, 79 large artillery pieces or naval

guns, 65 mortars, 300 antiaircraft guns, and numerous rocket launchers (1:13). All these troops and weapons were expertly deployed in their prepared positions, capable of withstanding heavy air and naval bombardment.

Observing the U.S. pattern of advance in the Pacific, the Japanese could see Iwo Jima was vital to the interests of both sides. Despite unusual command relationships and severe logistics problems, they were well-prepared for the anticipated American onslaught.

While the Japanese were preparing to defend Iwo Jima, the Americans began to assemble their forces in preparation for the assault. These commands, under the overall operational command of Admiral Spruance, consisted of:

Joint Expeditionary Force:

Vice-Admiral Richmond Kelly Turner, USN

Expeditionary Troops:

Lieutenant General Holland M. Smith, USMC

V Amphibious Corps (VAC):

Major General Harry Schmidt, USMC

The VAC included the 3rd Marine Division (Major General Graves B. Erskine), the 4th Marine Division (Major General Clifton B. Cates), and the 5th Marine Division (Major General Keller E. Rockey). These three divisions would constitute the major assault force on Iwo Jima.

The operation was code named "Detachment" and planning began in earnest in November 1944. The original target date of 20 January 1945 was delayed until 3 February and then to 19 February to ensure necessary shipping was available following extended operations in the Philippines.

The operation plan was built around the primary objectives of (1) destroying enemy naval and air strength in the Volcano-Bonins and (2) capturing, occupying, and defending Iwo Jima and developing an air base on that island (1:24). The landing force plan included a number of intermediate objectives and the scheme of maneuver was simple. The 4th and 5th Divisions would land abreast (see figure 3) on the southeast beach, which was the one selected because of prevailing northwesterly winds. The 3rd Division would initially be in corps reserve (1:26). Elements of the landing force conducted landing rehearsals in the Hawaiian Islands before embarking for movement to the objective area. While the expeditionary force was moving toward Iwo Jima, the island was undergoing the longest and most intensive preassault bombardment given any objective in the Pacific during World War II (1:39).

Naval and Army Air Force intelligence had indicated a massive preparation bombardment would be required. Accordingly, Iwo Jima was subjected to intensive Air Force B-24/29 raids (74 consecutive days beginning on 8 December 1944), Navy and Marine carrier and land-based air strikes, and naval gunfire bombardments. There was even a proposal to use chemical weapons (gas) in order to avoid the expected high U.S. casualties. This idea was rejected because, even though the U.S. had not signed the Geneva Convention outlawing gas, it was U.S. policy to use such weapons only in retaliation against initial use by the enemy (4:239-240). The final pre-D-Day naval gunfire shelling was a source of controversy between General Smith who favored ten days of shelling and Admiral Spruance who advocated three. Because of ammunition limitations and a conflict with a diversionary raid on the Tokyo area, three days of naval gunfire were provided.

Despite the three days of intensive naval gunfire, despite numerous earlier naval gunfire shellings, and despite thousands of bomber and attack aircraft sorties over several months, the Japanese defense capability was relatively undamaged. In fact, their capability to defend had improved during this time. At the beginning of the "softening," aerial photographic intelligence had identified 450 major defensive installations on Iwo. By the time D-Day arrived, there were 750 (5:243). General Kuibayashi's plan of defense was not hampered by the overwhelming might of U.S. firepower. It would be the task of the U.S. Marines to dislodge his forces from Iwo Jima the hard way--by direct assault.

#### ASSAULT/DEFENSE

##### D-Day (19 February 1945)

At 0640, 19 February, the Navy began its final pre-H-Hour bombardment with a devastating pounding of the landing beach area. At 0805, the gunfire lifted as 120 carrier aircraft bombed the landing area and Mount Suribachi. After this strike, naval gunfire commenced again on more inland targets as the first assault wave landed at 0902.

As the 4th and 5th Divisions went ashore, they initially encountered light opposition. The Marines were optimistic, thinking that estimates of enemy strength may have been exaggerated (1:53). Things changed, however, when the Japanese emerged from their holes and began heavily shelling the landing beaches in accordance with General Kuribayashi's plan. Difficulties for the Marines were compounded as men and equipment began to pile up on the beach. This congestion was caused by the fact that just inland of the beach, the terrain rose rapidly in a series of volcanic ash terraces which were difficult to cross, especially for



vehicles. The enemy shelling added to the problem by damaging landing craft and causing casualties on the beach resulting in further congestion and confusion.

Despite these difficulties, the 5th Division on the left (south) moved rapidly across the island, against light opposition, to the western beach. This advance severed the island at the narrowest part and isolated Mount Suribachi to the south. The 4th Division, on the right flank, advanced inland and north toward its first objective, Airfield Number One (see figure 3). It was slower going for the 4th Division due to rougher terrain and stronger enemy opposition which produced heavy casualties. As D-Day came to an end, both divisions dug in and prepared for the expected night counterattack, characteristic of previous Japanese island defenses.

General Smith had mixed feelings about the D-Day results. The U.S. forces were short of their planned D-Day objectives and had taken 2420 casualties (1:68). However, his forces were firmly established ashore with 40,000 men (see figure 4) and the anticipated Japanese night attack, which would catch his Marines when they were most vulnerable (first night ashore), never materialized.

#### Capture of Mount Suribachi

With Mount Suribachi isolated from possible reinforcement, the Marines could concentrate on its capture. This job was assigned to the 28th Marine Regiment (5th Division) under Lieutenant Colonel Harry Liversedge. The assault on the mountain began on the morning of 20 February (D + 1) and required four days of intense fighting before it was taken.

The main defenses were near the base of the volcano. These consisted of a series of interlocking concrete pillboxes supported by guns in caves, machine gun pits, trenches, and other obstacles (5:260). The Marines were able to break through these by integrated use of naval gunfire, tanks, artillery, flame throwers, demolition charges, and physical assault. Once through the initial defensive ring, the Marines had to contend with numerous small pockets of resistance higher up the mountain slopes. Finally, on the morning of 23 February, a small patrol reached the north-east rim. The four-day assault on Suribachi was culminated by the famous flag raising captured on film by Associated Press photographer, Joe Rosenthal (see figure 5). This flag raising had an electrifying effect on all Americans who saw it, but the more tangible results of the capture of Suribachi were what aided the American effort the most.

Taking Suribachi was expensive in terms of U.S. casualties (1,000), but the tactical gains were significant. First, the major threat to the congested landing beach was eliminated. The Japanese could no longer employ direct fire on the beach from Suribachi nor could they use the mountain as an observation post to adjust fires from the artillery batteries in the northern part of the island. Second, by removing this threat, the U.S. Navy could begin using the western beach for general off-loading of supplies and reinforcements as well as for casualty evacuation. This greatly relieved the congestion on the eastern beach. Finally, the loss of Suribachi was a severe blow to the morale of the Japanese defenders, not only because of the tactical significance, but because of the emotional and spiritual attachment they had with it. The capture of Suribachi was both rewarding and expensive for the Americans,

but the most demanding and costly phase of the operation was just beginning--the advance to the north.

#### Drive to the North

While the 28th Marine Regiment was assaulting Suribachi, the rest of the 5th Division as well as the 4th Division drove north toward Airfield Number One. The airfield was captured on 20 February (D + 1) and by D + 5, Navy Seabees were ashore working to repair it for use by U.S. aircraft even though intense fighting raged nearby and there was constant danger from incoming enemy artillery and mortar fire. The first B-29 to land there made an emergency landing on 4 March, two weeks before the major fighting was over. Many more were to follow.

The 4th and 5th Divisions continued north from Airfield Number One, but soon encountered the main network of General Kuribayashi's defenses. These defenses were designed to take advantage of the increasingly rough terrain and to protect the two northern most airfields. This area featured a broad, deep belt of fortifications running from coast to coast. The Japanese had constructed a maze of concrete bunkers General Smith described as a "masterpiece of impregnability" (5:265). Assaulting these defenses was so difficult that by 25 February (D + 6) General Smith had deployed the corps reserve (3rd Division) and the push north developed into a brute-force, three division abreast frontal assault that would continue throughout the operation (see figure 6).

The Marines discovered previously used tactics had to be modified because of the problems presented by the terrain, the enemy defensive fortifications, and the tenacity of the individual Japanese defenders. Rugged terrain, soft volcanic ash or sandy soil, and cleverly emplaced

mine fields made the use of tanks difficult. To counter this, the Marines utilized engineers to clear minefields under the cover of intense naval gunfire and artillery barrages. Then bulldozers created avenues to allow the tanks, flame throwing tanks, and Marines to advance, all still under the cover of rolling (advancing) fire support. Finally, the tanks and flame throwers engaged individual positions by direct fire followed by Marine assaults to finish off the stubborn defenders. The bulldozers proved to be a very valuable item by not only clearing paths, but by actually covering many Japanese positions and burying the defenders alive, thereby neutralizing them and allowing Marines to bypass many positions.

The Marines tried other innovations in order to advance and to reduce the heavy rate of casualties they were suffering. One such tactic was a predawn attack on 7 March by elements of the 3rd Division to attempt to catch the enemy sleeping. The attack was successful and achieved surprise, but because of darkness and confusion, only an intermediate objective was seized. The primary objective (Hill 362C, see figure 7) was subsequently taken later in the day, but with the usual casualties associated with daylight attacks.

The Japanese, meanwhile, were gradually losing the battle for Iwo Jima, but General Kuribayashi's plan of rigid defense to maximize American casualties was succeeding. However, the subordinate commanders, particularly the naval leaders under Rear Admiral Ichimaru, were dissatisfied with the restriction against offensive movement. On 8 March, probably aided by a breakdown in communications, a small force of naval personnel made a determined night attack aimed at Airfield Number One

and the aircraft assembled there. The attack was quickly broken up by U.S. artillery and the Japanese force suffered heavy casualties with very little loss of life by the Americans. This was the only serious offensive threat mounted by the Japanese except for a few minor banzai charges in the waning days. It was not directed by General Kuribayashi and its failure reaffirmed the general's belief that such endeavors were ineffective and wasteful. Following this abortive attack, the Japanese consolidated their positions and rededicated themselves to defending their diminishing hold on the island.

#### Final Phase/Mopping Up

The three Marine divisions continued to push northward. On 9 March, the first elements of the 3rd Division broke through to the sea at the north end of the island. Japanese resistance was still heavy in all sectors, but the Marines continued the successful tactics developed earlier. On 16 March, the island was officially declared secure although small pockets of organized Japanese continued to resist for several weeks. On 20 March, U.S. Army units began arriving and on 26 March, Major General James E. Chaney, USA, assumed operational control of all U.S. units on the island. The Marines, having accomplished their mission, departed the island.

#### RESULTS/SUMMARY

The Americans were successful in capturing Iwo Jima from the determined grip of the Japanese. The cost to both sides was extremely high: 5,931 U.S. Marines, 881 sailors, and 9 soldiers (6,821 total) lost their lives while some 20,000 Japanese perished (1:220,221). Planners

on each side knew in advance it would be a savagely fought battle with great loss of life. However, by securing Iwo Jima for American use, the United States was able to continue its long-range bombing campaign against Japan with far fewer losses in aircraft and crewmen. By the end of the war, a total of 2,251 B-29s carrying 24,761 crewmen landed on Iwo Jima (1:210). Without Iwo, many of these would have been lost due to the lack of a divert base or fighter protection Iwo Jima provided. Additionally, the threat of Japanese fighters launched from Iwo Jima was eliminated. The loss of Iwo Jima, which is in the Tokyo Prefecture, was also a severe blow to the deteriorating morale of the Japanese populace.

In summary, the Americans determined a need for a divert and fighter escort base for their long-range bombers. Iwo Jima was selected because it was the only island suitable for airfield construction. The Japanese recognized Iwo Jima's value and fortified it heavily, anticipating a U.S. assault. After thorough planning and preparation, the U.S. launched an amphibious operation to take Iwo Jima. U.S. forces fought a determined enemy in a savage, month-long battle and captured the island, but not before 27,000 Americans and Japanese were killed in the process. The heavy casualties on both sides attests to the fact that the Americans and Japanese fought each other with extreme dedication and commitment. What swung the balance in favor of the U.S. forces was superior application of the principles of war. To understand why this battle ended as it did, it is necessary to analyze how each side applied or violated these principles.

## SECTION II

### ANALYSIS OF THE PRINCIPLES OF WAR

#### INTRODUCTION

Analysis of the application of the principles of war by the Americans and Japanese can aid us in effectively employing military forces in the future. In this section, each principle of war as described in Air Force Manual 1-1 will be presented and defined. These principles are: Objective, Offensive, Surprise, Security, Mass, Economy of Force, Maneuver, Timing and Tempo, Unity of Command, Simplicity, Logistics, and Cohesion. Following each principle of war, there will be a description of American and Japanese examples of the use or violation of that principle during the struggle for Iwo Jima. There will be a determination as to which of the two forces most effectively applied or least violated each principle. Finally, the author will summarize the overall use of the principles by each side which led to the outcome.

#### OBJECTIVE

The most basic principle for success in any military operation is a clear and concise statement of a realistic objective. The objective defines what the military action intends to accomplish and normally describes the nature and scope of an operation. An objective may vary from the overall objective of a broad military operation to the detailed objective of a specific attack. The ultimate military objective of war is to neutralize or destroy the enemy's armed forces and his will

to fight. However, the intimate bond which ties war to politics cannot be ignored. War is a means to achieving a political objective and must never be considered apart from the political end. Consequently, political imperatives shape and define military objectives. It follows that the objective of each military operation must contribute to the overall political objective.

Success in achieving objectives depends greatly on the knowledge, strategy, and leadership of the commander. The commander must ensure that assigned forces are properly used to attain the objective. This requires that objectives be disseminated and fully understood throughout all appropriate levels of command. Clear and concise statements of objective greatly enhance the ability of subordinates to understand guidance and take appropriate actions. For aerospace operations, the air commander develops his broad strategy based on the primary objective, mindful of the capabilities of friendly forces (both man and machine), the capabilities and actions of the enemy, the environment, and sound military doctrine. Broad strategies derived from this combination of factors form the basis for selecting targets, means of attack, tactics of employment, and the phasing and timing of aerospace attacks. Always, the primary measure of success in employing aerospace forces is achieving the objective through knowledgeable use of men and their machines (8:2-4).

#### American

The United States had sound, clear-cut reasons for taking Iwo Jima despite the risks anticipated. Lieutenant General Smith, Expeditionary Troops Commander, believed that of all the operations in the Pacific, Iwo Jima offered the most tangible returns on the sacrifices (5:240). Assignment of operation objectives and intermediate objectives were made early and a logical operation plan and scheme of maneuver were built around them. There were some minor internal differences of opinion between General Smith and Admiral Spruance concerning the means used to accomplish the objectives, but these were resolved and all objectives were attained.



### Japanese

General Kuribayashi constructed his plan for the defense of Iwo Jima to achieve the objective of inflicting maximum U.S. casualties. Despite opposition from other Japanese commanders on the island, he stuck to his plan and was successful in attaining his objective.

### Most Effective Use/Least Violation: Americans

While both sides were successful in achieving their objectives, the Japanese objective was limited to inflicting casualties rather than attaining victory. The U.S. objectives effectively supported long-range goals and played an important part in the ultimate defeat of Japan.

### OFFENSIVE

Unless offensive action is initiated, military victory is seldom possible. The principle of offensive is to act rather than react. The offensive enables commanders to select priorities of attack, as well as the time, place, and weaponry necessary to achieve objectives. Aerospace forces possess a capability to seize the offensive and can be employed rapidly and directly against enemy targets. Aerospace forces have the power to penetrate to the heart of an enemy's strength without first defeating defending forces in detail. Therefore, to take full advantage of the capabilities of aerospace power, it is imperative that air commanders seize the offensive at the very outset of hostilities (8:2-5).

### Americans

Offensive maneuver is critical to an amphibious operation such as Iwo Jima. The very nature of the mission placed the Americans on the offensive, but this fact alone did not cause success. What proved to be the essential element of successful offensive warfare was the U.S. capacity to maintain the offensive throughout the entire operation.

The Americans accomplished this by using flexible, innovative tactics such as combining artillery, naval gunfire, and tank support with engineers, flame throwers, and direct assault. Additionally, the resourcefulness, courage, and staying-power of the U.S. forces in maintaining persistent offensive pressure on the enemy, despite heavy casualties, until the island was secured cannot be overemphasized. An example of this courage and devotion can be found in the 22 Marines and two sailors who were awarded the Medal of Honor for heroism during the battle.

#### Japanese

General Kuribayashi made a conscious decision to forego offensive maneuvers in favor of efficient use of terrain and fortified defenses. He even employed his 24 tanks as stationary camouflaged pillboxes which is diametrically opposed to generally accepted principles of mechanized force employment. The few minor offensive forays which occurred were a result of disobedience or confusion and were certainly not part of the overall plan.

#### Most Effective Use/Least Violation: Americans

Offensive movement is a necessary ingredient in successful amphibious operations and the Americans obviously utilized this principle. A defender can employ offensive maneuver effectively if done at the right time and with sufficient force. General Kuribayashi chose not to do this because he feared he would squander his forces which meant the best he could hope for was a stalemate rather than a victory.

## SURPRISE

Surprise is the attack of an enemy at a time, place, and manner for which the enemy is neither prepared nor expecting an attack. The principle of surprise is achieved when an enemy is unable to react effectively to an attack. Surprise is achieved through security, deception, audacity, originality, and timely execution. Surprise can decisively shift the balance of power. Surprise gives attacking forces the advantage of seizing the initiative while forcing the enemy to react. When other factors influencing the conduct of war are unfavorable, surprise may be the key element in achieving the objective. The execution of surprise attacks can often reverse the military situation, generate opportunities for air and surface forces to seize the offensive, and disrupt the cohesion and fighting effectiveness of enemy forces. Surprise is a most powerful influence in aerospace operations, and commanders must make every effort to attain it. Surprise requires a commander to have adequate command, control, and communications to direct his forces, accurate intelligence information to exploit enemy weaknesses, effective deception to divert enemy attention, and sufficient security to deny an enemy sufficient warning and reaction to a surprise attack (8:2-5).

### Americans

This operation did not present the opportunity for surprise in the classic sense as did the attack on Pearl Harbor or the U.S. attacks on the Japanese fleet during the Battle of Midway. The advantages of capturing Iwo Jima during the U.S. advances northward were too obvious to both sides to expect either side to be unprepared. However, on a smaller scale, the U.S. did make some effort to deceive the Japanese or achieve surprise. Admiral Mitscher conducted a carrier strike on the Tokyo area several days prior to D-Day to divert attention and reduce the enemy's capability to retaliate by air once the landings started at Iwo. The Navy arranged a "media leak" to fool the Japanese into thinking increased naval activity was in support of an impending landing on Formosa. The Japanese were not fooled (1:31).

Finally, the predawn attack by the 3rd Division on 7 March succeeded in surprising the enemy and achieved some limited success.

#### Japanese

The Japanese made no significant attempts at surprising the Americans. The Marines were "surprised," however, to discover the large number of fortifications able to withstand the preassault bombardment. Secondly, they were not expecting Kuribayashi's tactics which were void of offensive maneuver.

#### Most Effective Use/Least Violation: Americans

This was not an operation that featured subtleties or finesse. Conditions leading up to it severely reduced the effectiveness of attempts at surprise. Nevertheless, the U.S. did make the effort and a small measure of success resulted.

#### SECURITY

Security protects friendly military operations from enemy activities which could hamper or defeat aerospace forces. Security is taking continuous, positive measures to prevent surprise and preserve freedom of action. Security involves active and passive defensive measures and the denial of useful information to an enemy. To deny an enemy knowledge of friendly capabilities and actions requires a concerted effort in both peace and war. Security protects friendly forces from an effective enemy attack through defensive operations and by masking the location, strength, and intentions of friendly forces. In conducting these actions, air commanders at all levels are ultimately responsible for the security of their forces. Security in aerospace operations is achieved through a combination of factors such as secrecy, disguise, operational security, deception, dispersal, maneuver, timing, posturing, and the defense and hardening of forces. Security is enhanced by establishing an effective command, control, communications, and intelligence network. Intelligence efforts minimize the potential for enemy actions to achieve surprise or maintain an initiative, and effective command,

control, and communications permit friendly forces to exploit enemy weaknesses and respond to enemy actions (8:2-5).

#### Americans

Normal security measures were employed, but because of the size and complexity of the U.S. operation, it was difficult to avoid breaches in security. Fortunately for the Americans, no major violations of this principle existed.

#### Japanese

The Japanese were forced by events such as a lack of naval forces and intensive U.S. interdiction to reinforce piecemeal and at night prior to the battle. Their success attests to their strict use of security. Ashore, General Kuribayashi made excellent use of camouflage and concealment which created difficulties for the Americans in pinpointing Japanese positions. He constructed an extensive network of underground lines of communication. Except for communicating with his forces on Mount Suribachi after it was isolated by the U.S. advance across the island, he did not have to rely on radio communications, which reduced his vulnerability.

#### Most Effective Use/Least Violation: Japanese

The Japanese most effectively followed the principle of security, but it is not difficult to understand why. Simplicity of plan, limitations on materiel and technology, and defensive operations are far more conducive to adequate security than large-scale, complex, offensive operations.

## MASS

Success in achieving objectives with aerospace power requires a proper balance between the principles of mass and economy of force. Concentrated firepower can overwhelm enemy defenses and secure an objective at the right time and place. Because of their characteristics and capabilities, aerospace forces possess the ability to concentrate enormous decisive striking power upon selected targets when and where it is needed most. The impact of these attacks can break the enemy's defenses, disrupt his plan of attack, destroy the cohesion of his forces, produce the psychological shock that may thwart a critical enemy thrust, or create an opportunity for friendly forces to seize the offensive. Concurrently, using economy of force permits a commander to execute attacks with appropriate mass at the critical time and place without wasting resources on secondary objectives. War will always involve the determination of priorities. The difficulty in determining these priorities is directly proportional to the capabilities and actions of the enemy and the combat environment. Commanders at all levels must determine and continually refine priorities among competing demands for limited aerospace assets. This requires a balance between mass and economy of force, but the paramount consideration for commanders must always be the objective. Expending excessive efforts on secondary objectives would tend to dissipate the strength of aerospace forces and possibly render them incapable of achieving the primary objective. Economy of force helps to preserve the strength of aerospace forces and retain the capability to employ decisive firepower when and where it is needed most (8:2-6).

## Americans

The Battle of Iwo Jima, like all of the battles in the Pacific in 1944 and 1945, featured American massing of superior forces. The U.S. industrial capacity is what the Japanese feared most and this capability, once converted to a massive war effort, is what eventually defeated Japan. In this battle, the U.S. had overwhelming material and personnel superiority. However, the Japanese defenses were so well-fortified and General Kuribayashi's tactic of tenacious defense to the death was so effective that U.S. forces had to be massed in a coordinated manner to be effective. Preassault bombing and naval gunfire were ineffective

by themselves. Unsupported armor assaults were ineffective. Marine attacks on fortified positions without coordinated supporting fires produced excessive casualties. After U.S. field commanders determined the correct mix of assault troops and supporting fires, effective massing became commonplace. General Smith employed the corps reserve because he saw the need for increased massing of troops. Even so, the Japanese were so efficient in their defense and the battle lasted so long that his ability to mass troops diminished because of casualties and fatigue. However, Japanese fanaticism and their will to die for their emperor were matched and surpassed by a flexible and imaginative massing of U.S. firepower and physical assault.

#### Japanese

General Kuribayashi decided to mass his troops in two general areas-- the northern half of the island and on Mount Suribachi. He did this because those two areas offered the most defensible terrain. He believed he could disrupt the American landings by massing his artillery, mortar, and rocket fires on the landing beaches. This proved to be effective, but not decisive. Iwo Jima had a limited number of suitable landing beaches and General Kuribayashi knew this. The Americans discovered the most effective use of mass combined supporting arms with troop assault. Had Kuribayashi realized this, he would have massed not only artillery, but dug-in troops in the landing beach area. This would have applied his combined firepower when the Americans were most vulnerable.

Most Effective Use/Lease Violation:  
Americans

The Americans effectively applied the principle of mass, although more troops would have helped. The Japanese failed to take advantage of their prior knowledge of the landing beach location by properly combining supporting fires with manned defensive positions. General Kuribayashi accomplished his objective of inflicting maximum U.S. casualties during the battle, however, his failure to properly mass his forces at the right time and place may have cost him a victory he possibly could have had.

ECONOMY OF FORCE

Success in achieving objectives with aerospace power requires a proper balance between the principles of mass and economy of force. Concentrated firepower can overwhelm enemy defenses and secure an objective at the right time and place. Because of their characteristics and capabilities, aerospace forces possess the ability to concentrate enormous decisive striking power upon selected targets when and where it is needed most. The impact of these attacks can break the enemy's defenses, disrupt his plan of attack, destroy the cohesion of his forces, produce the psychological shock that may thwart a critical enemy thrust, or create an opportunity for friendly forces to seize the offensive. Concurrently, using economy of force permits a commander to execute attacks with appropriate mass at the critical time and place without wasting resources on secondary objectives. War will always involve the determination of priorities. The difficulty in determining these priorities is directly proportional to the capabilities and actions of the enemy and the combat environment. Commanders at all levels must determine and continually refine priorities among competing demands for limited aerospace assets. This requires a balance between mass and economy of force, but the paramount consideration for commanders must always be the objective. Expending excessive efforts on secondary objectives would tend to dissipate the strength of aerospace forces and possibly render them incapable of achieving the primary objective. Economy of force helps to preserve the strength of aerospace forces and retain the capability to employ decisive firepower when and where it is needed most (8:2-6).



### Americans

The nature of the Japanese defenses coupled with the rugged terrain of Iwo Jima required intensive U.S. firepower and assault to take the island from the Japanese. This resulted in the balance between mass and economy of force being out of balance in favor of mass.

### Japanese

General Kuribayashi did not have the luxury of unlimited materiel or personnel. He was aware of the U.S. superiority and he believed it was not possible to prevent the U.S. from eventually winning control of the island. This is why he decided on his course of action to inflict maximum casualties on the Americans. To do this, he realized he must prolong the battle as long as possible. This required extensive preparation of fortified positions and taking advantage of terrain features. He employed his manpower in constructing defensive positions and building a tunnel system rather than constructing and repairing airfields. During the battle, he insisted his men remain in covered positions and fight defensively rather than expose themselves in offensive attacks. He controlled ammunition expenditures so that he could retain a fire support capability throughout the battle. General Kuribayashi had limited assets and he knew there would be no resupply once the Americans arrived. Therefore, economy of force became a necessity for him and he succeeded.

### Most Effective Use/Least Violation: Japanese

Other than minimizing casualties, the Americans were not overly concerned with economy as much as they were with massing force. The

Japanese chose economy over mass, achieved their objective of heavy U.S. casualties, but lost the battle.

#### MANEUVER

War is a complex interaction of moves and countermoves. Maneuver is the movement of friendly forces in relation to enemy forces. Commanders seek to maneuver their strengths selectively against an enemy's weakness while avoiding engagements with forces of superior strength. Effective use of maneuver can maintain the initiative, dictate the terms of engagement, retain security, and position forces at the right time and place to execute surprise attacks. Maneuver permits rapid massing of combat power and effective disengagement of forces. While maneuver is essential, it is not without risk. Moving large forces may lead to loss of cohesion and control (8:2-6).

#### Americans

The initial U.S. maneuver was designed to isolate Mount Suribachi. The 5th Division accomplished this quickly by advancing across the island to the western beach. This meant Suribachi was cut off from possible reinforcement from the north and the mountain was captured in four days. The advance to the north was accomplished in a broad frontal assault, but General Schmidt, the V Amphibious Corps Commander, was careful to ensure no single division forged too far ahead of the others. If this were allowed to happen, the enemy would have been able to direct intense flanking fire on the extended division.

The use of bulldozers enhanced maneuverability, both physically and tactically. First, they created paths through the volcanic ash terraces at the beaches, then leveled unpassable terrain inland so that tank fire could be brought to bear on hardened enemy positions. In addition, the bulldozers contributed to a small-scale version of the U.S. policy of bypassing selected Japanese strongholds in the Pacific

by burying certain Japanese positions, allowing the Marines to bypass them. This permitted the Marines to maintain their scheme of maneuver until objectives were secured. Bypassed positions were engaged later as the situation permitted.

#### Japanese

Since the Japanese were committed to a static defense, they made little use of maneuver. They did utilize their tunnel network and the cover of darkness to occasionally reposition small units.

#### Most Effective Use/Least Violation: Americans

The small size and rugged terrain of Iwo Jima did not offer the Americans the opportunity for grand, sweeping maneuvers. However, the Marine commanders maneuvered their forces as much as possible to take advantage of Japanese weak points while avoiding stronger defenses. General Kuribayashi's decision to bury his tanks up to their turrets and use them as fixed artillery is a classic example of violation of the maneuver principle.

#### TIMING AND TEMPO

Timing and tempo is the principle of executing military operations at time and at a rate which optimizes the use of friendly forces and which inhibits or denies the effectiveness of enemy forces. The purpose is to dominate the action, to remain unpredictable, and to create uncertainty in the mind of the enemy. Commanders seek to influence the timing and tempo of military actions by seizing the initiative and operating beyond the enemy's ability to react effectively. Controlling the action may require a mix of surprise, security, mass, and maneuver to take advantage of emerging and fleeting opportunities. Consequently, attacks against an enemy must be executed at a time, frequency, and intensity that will do the most to achieve objectives. Timing and tempo require that commanders have an intelligence structure that can identify opportunities and a command, control, and communications network that

can responsively direct combat power to take advantage of those opportunities (8:2-6).

#### Americans

The rescheduling of D-Day from 20 January to 3 February and then to 19 February 1945 was done to ensure adequate assault shipping was available. An obvious trade-off existed by delaying the invasion a month. The Japanese had more time to prepare, but the U.S. would have violated the principle of mass with insufficient shipping. The large volume of supplies and equipment to support the assault forces helped sustain the high tempo of operations during the battle. During the operation ashore, the Marines attempted to capitalize on the principle of timing by refining the coordination between the "rolling barrage" fire support and troop assault. The intense artillery and naval gunfire barrages caused the defenders to withdraw deep into their bunkers. If the timing was right, the Marines were able to advance quickly, as soon as the supporting fires shifted, and overrun the Japanese before they had the chance to return to their firing positions. If the timing was off, the Marines were either caught in their own supporting fires or faced heavier opposition from the Japanese. Fortunately for the Marines, they were able to perfect the coordination and increase overall effectiveness.

#### Japanese

The Japanese were concerned with timing also. They had to quickly return to their firing positions as soon as they perceived a lifting of artillery fire. They did develop an interesting technique to disrupt U.S. supporting fires. As soon as the Americans began their

barrage, the Japanese called in their own artillery fire on the Marines to their front who were poised for the attack. If the timing was right, the Marines were occasionally deceived, thinking these were friendly short-rounds and causing them to call for a cease fire until things could be sorted out (1:126). This tactic was innovative, but did not have a measurable effect on the battle.

Most Effective Use/Least Violation:  
Americans

By refining the timing between their supporting fires and troop assaults, the Marines were able to maintain a high tempo of pressure on the enemy.

UNITY OF COMMAND

Unity of command is the principle of vesting appropriate authority and responsibility in a single commander to effect unity of effort in carrying out an assigned task. Unity of command provides for the effective exercise of leadership and power of decision over assigned forces for the purpose of achieving a common objective. Unity of command obtains unity of effort by the coordinated action of all forces toward a common goal. While coordination may be attained by cooperation, it is best achieved by giving a single commander full authority.

Unity of command is imperative to employing all aerospace forces effectively. The versatility and decisive striking power of aerospace forces places an intense demand on these forces in unified action. To take full advantage of these qualities, aerospace forces are employed as an entity through the leadership of an air commander. The air commander orchestrates the overall air effort to achieve stated objectives. Effective leadership through unity of command produces a unified air effort that can deliver decisive blows against an enemy and exploit his weaknesses. The air commander, as the central authority for the air effort, develops strategies and plans, determines priorities, allocates resources, and controls assigned aerospace forces to achieve the primary objective. Success in carrying out these actions is greatly enhanced by an effective command, control, communications, and intelligence network (8:2-6).

### Americans

The U.S. forces clearly exhibited unity of command. The overall commander of the operation was Admiral Spruance. Subordinate commanders cooperated well and were free to express dissent, as did General Smith in expressing his disagreement with the navy decision to provide only three days of preassault naval gunfire. Although not to General Smith's liking, Admiral Spruance's decision to adhere to the three day plan demonstrated unity of command since the overall continuity of effort was not disrupted. Additionally, the principle of unity of command, when coupled with a well-defined chain of command, proved its value during the battle. Many Marine units lost commanders due to enemy action. However, the next senior officer simply assumed command and continued the battle.

### Japanese

Lieutenant General Kuribayashi was "in command" because of seniority compared to the other two major unit commanders, Major General Senda and Rear Admiral Ichimaru. The Japanese were forced to rely heavily on cooperation among units and services. Commanders' egos played instrumental roles in formulating defense policy and there were some major disagreements. The naval planners called for heavy defense of the landing beach area to defeat the enemy at the water's edge. Kuribayashi felt otherwise and his plan prevailed although he was forced to make some concessions to the navy (1:11). Later in the battle, there were some minor departures from Kuribayashi's defense plan as some unit leaders led their units on brief, unsuccessful attacks.

Most Effective Use/Least Violation:  
Americans

The Americans observed this principle and it resulted in unity of effort. The Japanese violated it and it caused some problems for General Kuribayashi and some inefficient expenditure of forces during the battle.

SIMPLICITY

To achieve a unity of effort toward a common goal, guidance must be quick, clear, and concise--it must have simplicity. Simplicity promotes understanding, reduces confusion, and permits ease of execution in the intense and uncertain environment of combat. Simplicity adds to the cohesion of a force by providing unambiguous guidance that fosters a clear understanding of expected actions. Simplicity is an important ingredient in achieving victory, and it must pervade all levels of a military operation. Extensive and meticulous preparation in peacetime enhances the simplicity of an operation during the confusion and friction of wartime. Command structures, strategies, plans, tactics, and procedures must all be clear, simple, and unencumbered to permit ease of execution. Commanders at all levels must strive to establish simplicity in these areas, and the peacetime exercise of forces must strive to meet that same goal (8:2-7).

Americans

Conducting a large-scale amphibious operation is not a simple undertaking. All the various participating factors such as shipping, fire support, logistics, ship-to-shore movement, communications, and many others make it a complex operation. The objective, of course, is to make all this complexity as simple as possible. In this operation, the scheme of maneuver was simple and effective. Any other difficulties caused by a lack of simplicity were overcome by reliance on other principles such as mass, logistics, and timing and tempo.

## Japanese

General Kuribayashi's plan was extremely simple and correctly so. He knew he would have limited assets and no reinforcements once the battle started. He anticipated communications problems so kept his guidance simple and did not plan for offensive counterattacks which would have required extensive coordination. He did not have to concern himself with employment of reserve forces or casualty evacuation. Finally, when all else failed, he could rely on the code of bushido and knew all of his soldiers would do their duty.

### Most Effective Use/Least Violation:

#### Japanese

Viewed as a single principle, simplicity was most effectively employed by the Japanese. Compared to the Japanese operation, the U.S. effort was extremely complex, but the Americans cannot be accused of violating this principle. Rather, they blended it with the other principles to create the best combination for the task.

## LOGISTICS

Logistics is the principle of sustaining both man and machine in combat. Logistics is the principle of obtaining, moving, and maintaining warfighting potential. Success in warfare depends on getting sufficient men and machines in the right position at the right time. This requires a simple, secure, and flexible logistics system to be an integral part of an air operation. Regardless of the scope and nature of a military operation, logistics is one principle that must always be given attention. Logistics can limit the extent of an operation or permit the attainment of objectives. In sustained air warfare, logistics may require the constant attention of an air commander. This can impose a competing and draining demand on the time and energy of a commander, particularly when that commander may be immersed in making critical operational decisions. This competing demand will also impose a heavy burden on a command, control, and communications network. The information, mechanics, and decisions required to get men, machines, and their required materiel where and when they are



needed is extensive and demanding. During intense combat, these logistics decisions may even tend to saturate the time and attention of a commander. To reduce the stresses imposed by potentially critical logistics decisions, commanders must establish a simple and secure logistic system in peacetime that can reduce the burden of constant attention in wartime.

Effective logistics also requires a flexible system that can function in all combat environments and that can respond to abrupt and sudden change. For example, if weather or enemy activities force a move in operating locations, sustaining an air operation may depend on a logistics system that can respond to that exigency. Therefore, in preparing for war, air commanders must establish and integrate a logistics system that can keep pace with the requirements of air operations in combat. This requires a flexible logistics system that is not fixed, and one that can provide warfighting potential when and where it is needed (8:2-7).

#### Americans

The U.S. possessed an overwhelming logistical advantage featuring a sealift of 485 ships as well as extensive airlift to deliver 98,000 tons of supplies during the operation (1:38). The only significant problems encountered were in moving supplies across the landing beaches. This was overcome by using tracked vehicles and steel matting to facilitate movement. As compared to earlier Pacific island operations, the Marines ashore were not lacking anything they needed to fight the battle.

#### Japanese

Equipment and supplies were available to the Japanese because of proximity to the home islands of Japan and because earlier island defeats had eliminated the necessity of resupplying as many far-flung Japanese outposts. The problem the Japanese faced was in actually transporting the materiel to Iwo Jima because of a critical shortage of transport shipping and naval escorts. Airlift was also minimal and both modes of transportation were under constant threat of attack by

U.S. naval and air forces. This forced what limited movement there was to be at night. The problem was further compounded by the lack of a port facility at Iwo. This required a time-consuming process of transferring the supplies from ships anchored offshore into small craft for the trip to the beach. Many Japanese ships became easy targets for U.S. warships and aircraft during this time.

Most Effective Use/Least Violation:  
Americans

The combined effects of extensive logistic support and U.S. efforts to deny the same to the Japanese gave the Americans a clear advantage. The Japanese, through perseverance despite a high loss rate, were able to acquire enough materiel to sustain them for the duration of the operation. However, the Marines had an inexhaustable supply of weapons, ammunition, and equipment to call on, which, coupled with their determination, eventually wore down the enemy.

COHESION

Cohesion is the principle of establishing and maintaining the warfighting spirit and capability of a force to win. Cohesion is the cement that holds a unit together through the trials of combat and is critical to the fighting effectiveness of a force. Throughout military experience, cohesive forces have generally achieved victory, while disjointed efforts have usually met defeat. Cohesion depends directly on the spirit a leader inspires in his people, the shared experiences of a force in training or combat, and that the sustained operational capability of a force. Commanders build cohesion through effective leadership and generating a sense of common identity and shared purpose. Leaders maintain cohesion by communicating objectives clearly, demonstrating genuine concern for the morale and welfare of their people, and employing men and machines according to the dictates of sound military doctrine. Cohesion in a force is produced over time through effective leadership at all levels of command (8:2-8).

### Americans

The cohesiveness of the U.S. forces proved to be a critical factor in this victory. Unity of purpose, cooperation, and a commitment to the final goal by all services enabled them to sustain themselves throughout an operation much longer and much more difficult than anticipated. U.S. leadership was stronger and more imaginative than the Japanese. The chain of command was sound and the flow of information up and down the chain did not break down. Finally, the most significant cohesive element that carried the U.S. forces through to final victory at Iwo Jima was the Marine Esprit de Corps. This intangible force was many times the only thing which gave individual Marines the courage and stamina to face withering machine gun fire as they repeatedly assaulted stubbornly defended Japanese positions.

### Japanese

The Japanese also were a cohesive force built on discipline and a blind obedience and devotion to their emperor. However, the Japanese foundation of cohesiveness on Iwo Jima had several flaws in it caused by disunity of command, service rivalries, and imperfect communications. Later, as things began to deteriorate, Japanese cohesiveness broke down.

### Most Effective Use/Least Violation: Americans

American cohesiveness proved to be stronger due to a sounder organization for combat. This organization featured consistency throughout planning, preparation, and execution. The result was a commonality of purpose shared by all Americans throughout the operation.

### SUMMARY

When totalling the effective use or least violation of individual principles of war, the Americans prevailed in the principles of objective, offensive, surprise, mass, maneuver, timing and tempo, unity of command, logistics, and cohesion. The Japanese excelled in the use of the principles of security, economy of force, and simplicity. Some of these principles were more prominent than others and played a more significant role. These include: objective, mass, economy of force, logistics, and cohesion. The other principles played their part in this battle also, which leads to the reason for the U.S. victory. Effective integration of all principles of war by the Americans was the key to U.S. success. They had no glaring violations of any of the principles as did the Japanese in their questionable choice of objective or in disunity of command. Some of the violations by the Japanese were beyond their control such as logistics supportability. Finally, it is true that the U.S. had vast superiority of force by 1945. However, the simple fact remains that the situation called for taking an important island stronghold from a professional, fanatically dedicated enemy. The Americans succeeded because of superior application of all the principles of war by an equally professional, dedicated military force.

### SECTION III

#### DISCUSSION QUESTIONS

##### INTRODUCTION

The purpose of this section is to provide discussion questions, in a guided discussion format, relating to the Battle of Iwo Jima and the principles of war as presented in the first two sections of this paper. The format is as follows:

1. Lead-Off Question

Discussion (question answered)

a. Follow-Up Question

Discussion (question answered)

##### QUESTIONS

1. Lead-Off Question

How did U.S. actions in the Pacific Campaign and at Iwo Jima conform to the strategy process?

Discussion

The strategy process consists of four fundamental steps that range from determination of national objectives and grand strategy for achieving those objectives to military strategy and its resulting battlefield tactics. Each step forms one link in the chain that must connect ends with means (6:7-8). The U.S. objective was the total

defeat of the Japanese Empire. The grand strategy developed for this featured overwhelming military force application as the primary instrument of power (as opposed to economic or political pressures). The plan, or military strategy followed was the two-pronged advance by MacArthur through the Philippines and Nimitz and Spruance via the Solomons, Gilberts, Marshalls, and Marianas. This strategy was characterized by seizure of critical islands while bypassing Japanese strongholds not necessary for final victory. The bases gained by capturing the Marianas permitted long range bombing of Tokyo as a preparation for the anticipated final invasion of Japan. U.S. planners believed Iwo Jima was essential to the success of the long-range bombing program and decided to capture the island. Since the Japanese also recognized the value of Iwo Jima, they prepared a formidable defense. Only through sound battlefield tactics built upon effective application of the principles of war were the Americans able to win control of the island and maintain the continuity, or linkage connecting ends and means.

a. Follow-Up Question

What were the reasons for the U.S. seizure of Iwo Jima?

Discussion

The U.S. required a divert base for long-range bomber missions flown from the Marianas against Japan. Such a location could also provide a base for needed fighter protection. Iwo Jima was the only suitable island for this and the Japanese already had airfields and fighters there. Taking Iwo not only provided the needed U.S. base, but eliminated the Japanese fighter threat to the long-range bombers.

b. Follow-Up Question

In view of the anticipated heavy casualties, were there any alternatives to a standard amphibious assault on Iwo Jima?

Discussion

Other alternatives considered (and rejected) included: use of another island (terrain unsuitable), use of navy fighter cover and neutralization of the Japanese fighter threat at Iwo Jima (did not solve the divert base problem), use of gas on Iwo Jima prior to invasion (first use did not conform to U.S. policy on gas), use of the atomic bomb (even if it were available, it would have contaminated the island and precluded its use as a divert base).

2. Lead-Off Question

Of the 12 principles of war, which were best applied by the Americans?

Discussion

The Americans best applied the principles of objective, offensive, surprise, mass, maneuver, timing and tempo, unity of command, logistics, and cohesion.

a. Follow-Up Question

Of the principles best applied by the Americans, which three were most significant?

Discussion

The three most significant principles were logistics, mass, and cohesion. The nature of the Japanese defenses demanded a sustained assault unprecedented in the Pacific Campaign. A force capable of dislodging this determined enemy from an extremely defensible island fortress required three major ingredients. First, the attacking force

must be large and well-equipped, capable of sustained warfare. Second, the defenses could be defeated only by massing attacking forces with supporting fires to overwhelm the defenders. Lastly, because of the complexity, difficulty, and duration of the operation, only a cohesive force featuring a unity of purpose and determination would be successful.

### 3. Lead-Off Question

Of the 12 principles of war, which were best applied by the Japanese?

#### Discussion

The Japanese best applied the principles of security, economy of force, and simplicity.

#### a. Follow-Up Question

Of the principles violated by the Japanese, was there any single principle, over which they had control, that could have resulted in victory if properly applied?

#### Discussion

The most seriously violated principle of war was objective. General Kuribayashi achieved his objective, but he had the wrong objective. His goal was to kill as many Americans as he could rather than prevent the U.S. from seizing the island. He organized his defenses in the areas of most rugged terrain which were certainly defensible, but he did not adequately defend the landing beaches. He had a tremendously significant tactical advantage most defenders in warfare never have-- because of prohibitive terrain, he knew in advance where the enemy had to land his forces. However, he failed to take advantage of this and the Americans were allowed to establish a beachhead instead of being



annihilated when they were most vulnerable. This enabled the Americans to continue the assault and, though many Americans died, Kuribayashi lost the battle.

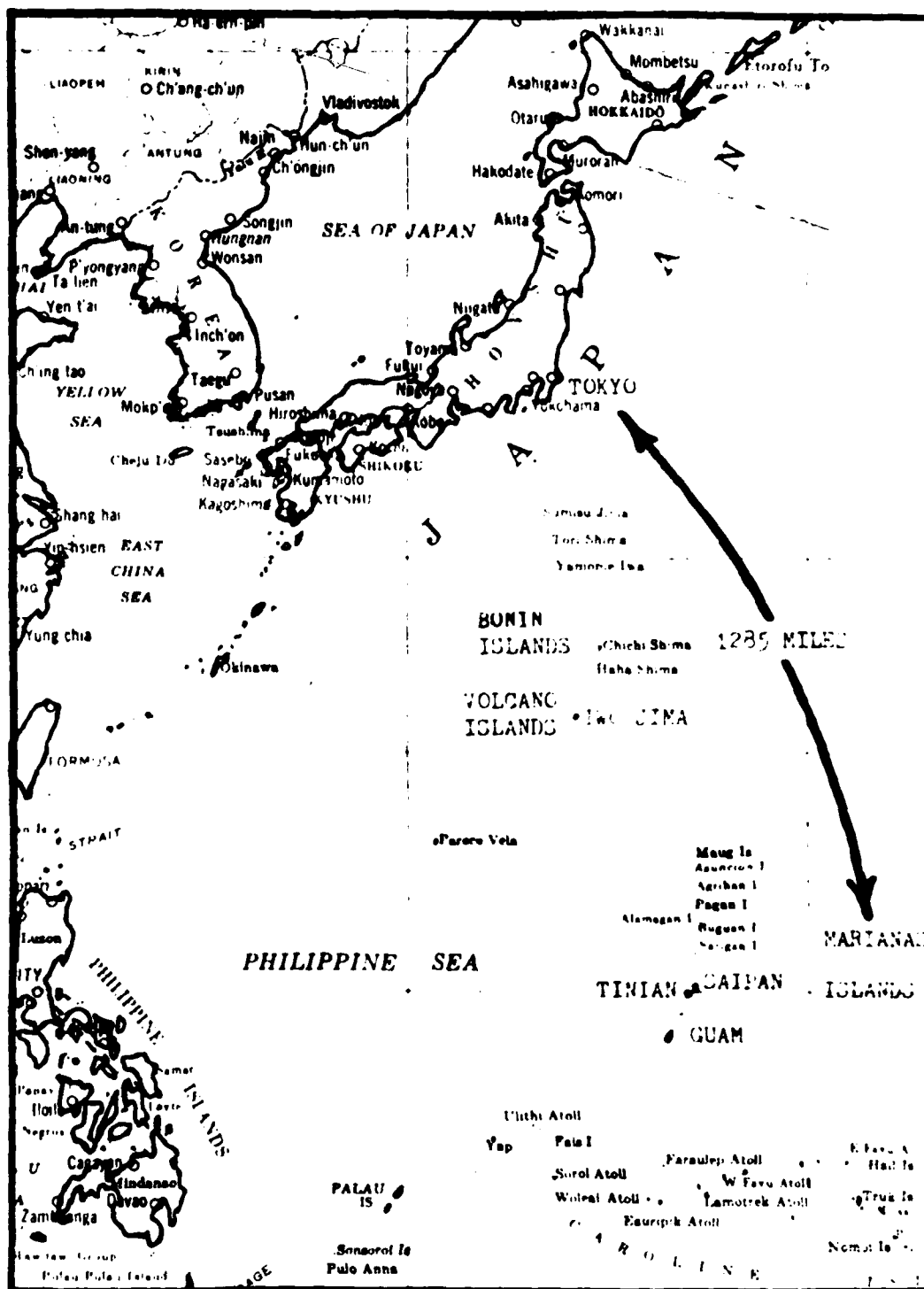


Figure 1 Map of Northwestern Pacific (9).

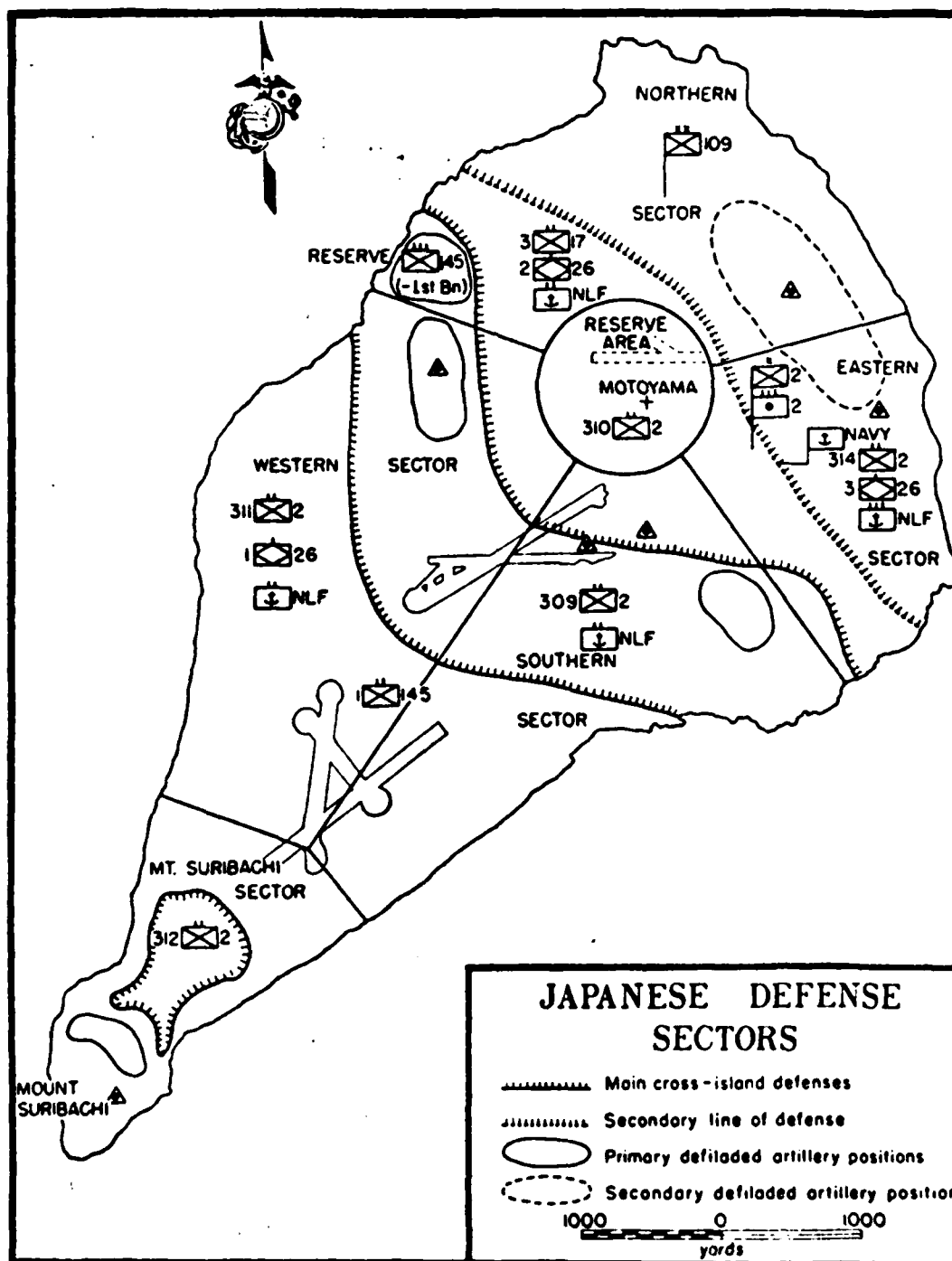


Figure 2 (1:10)

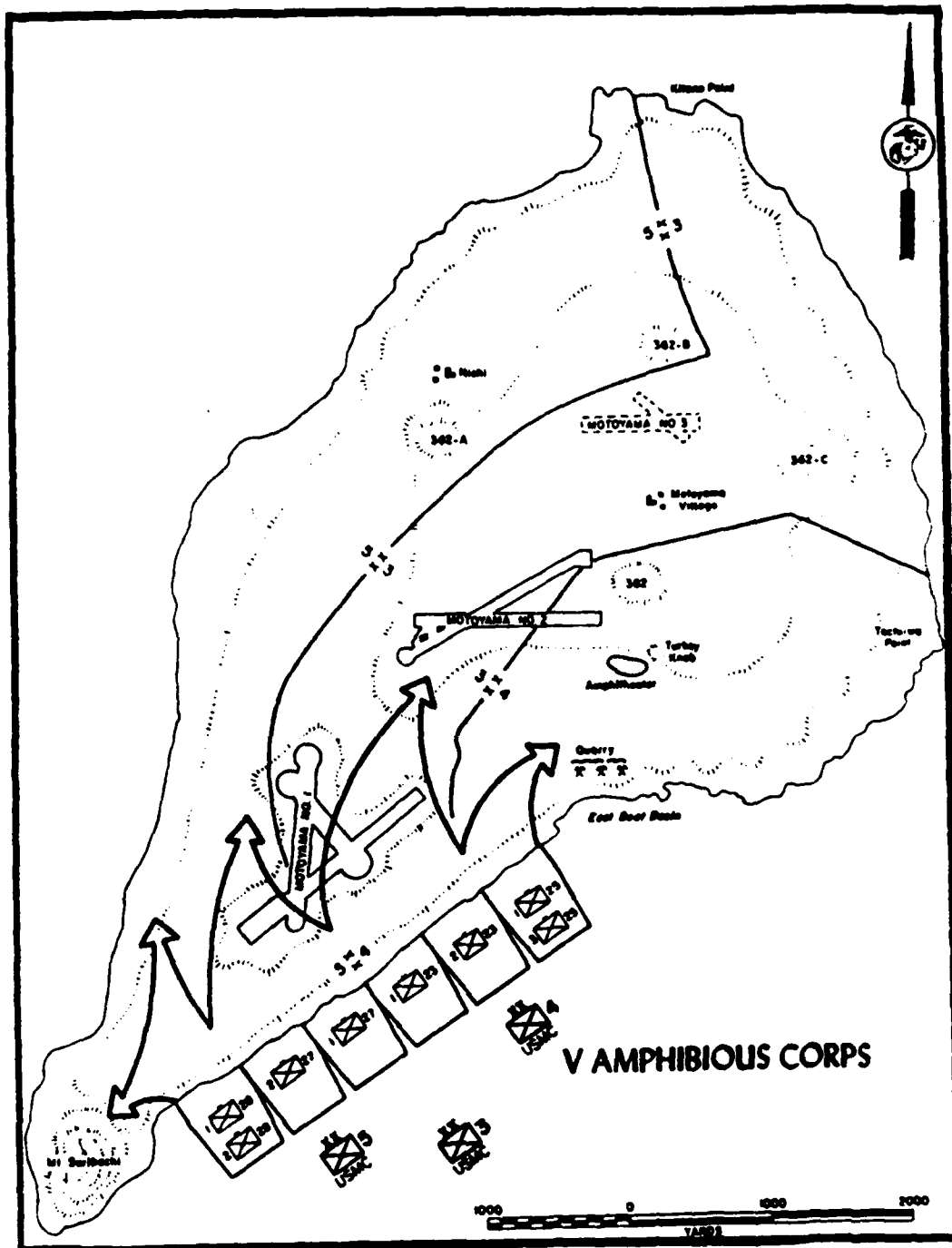


Figure 3 Landing Beaches (3:33)

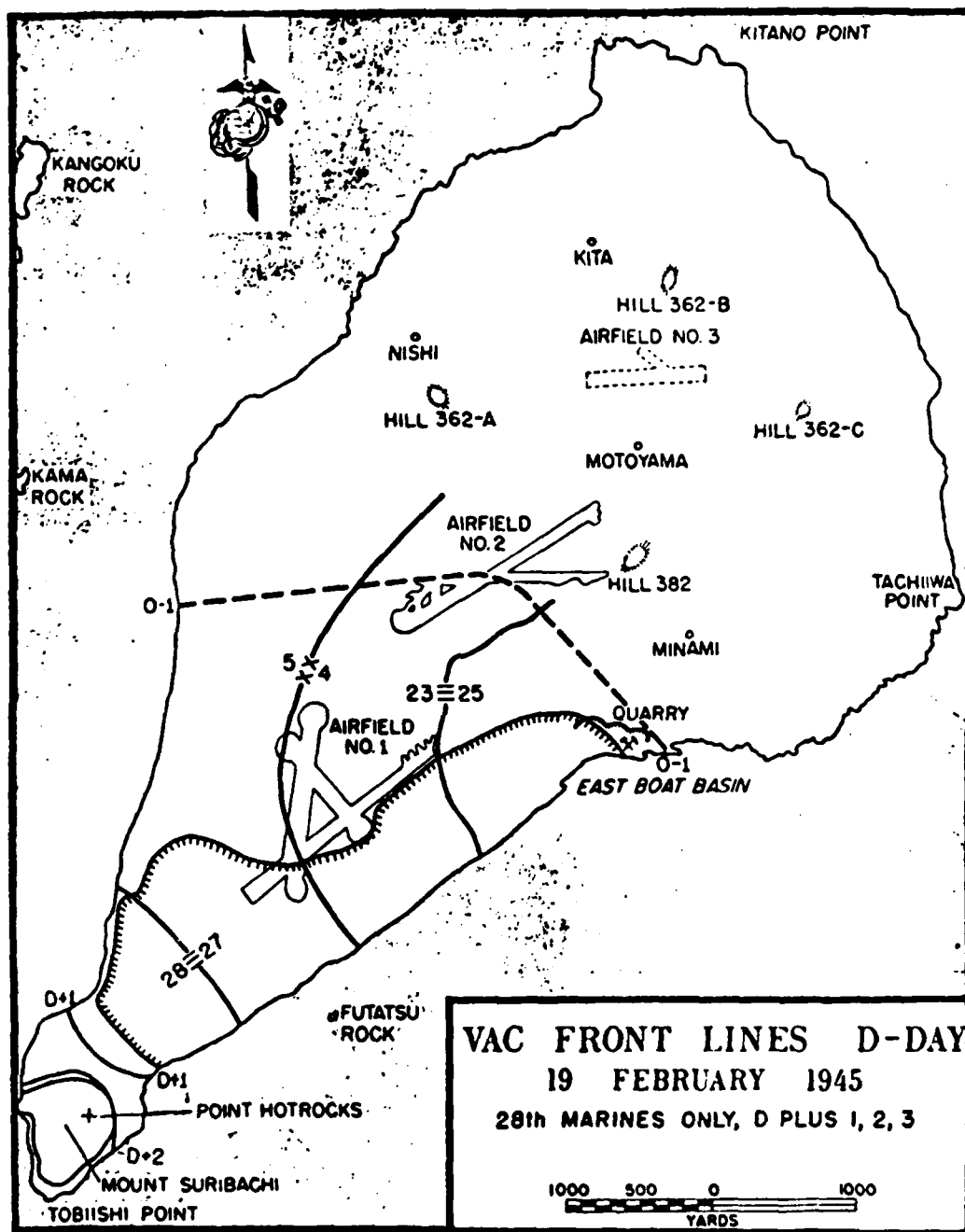


Figure 4 (1:66)



Figure 5 Flag Raising Photograph by Joe Rosenthal (1:74)

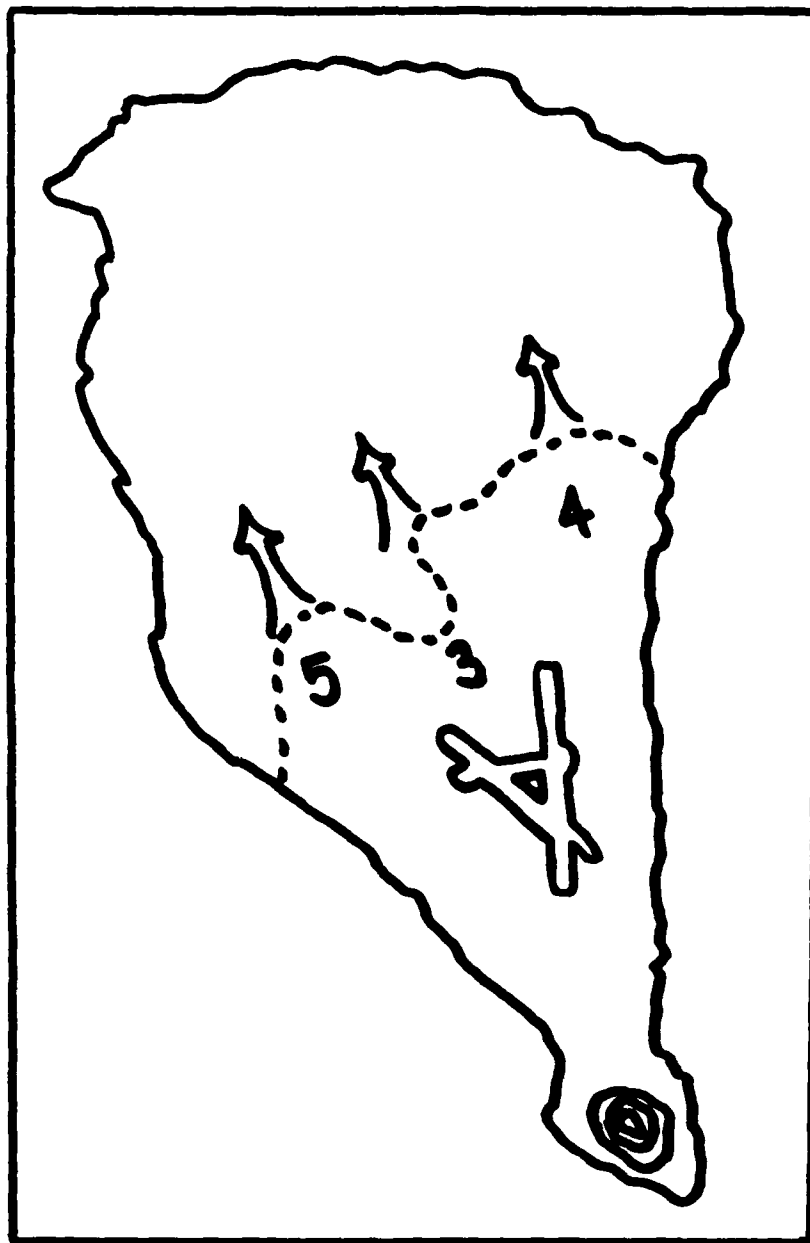


Figure 6 Drive to the North

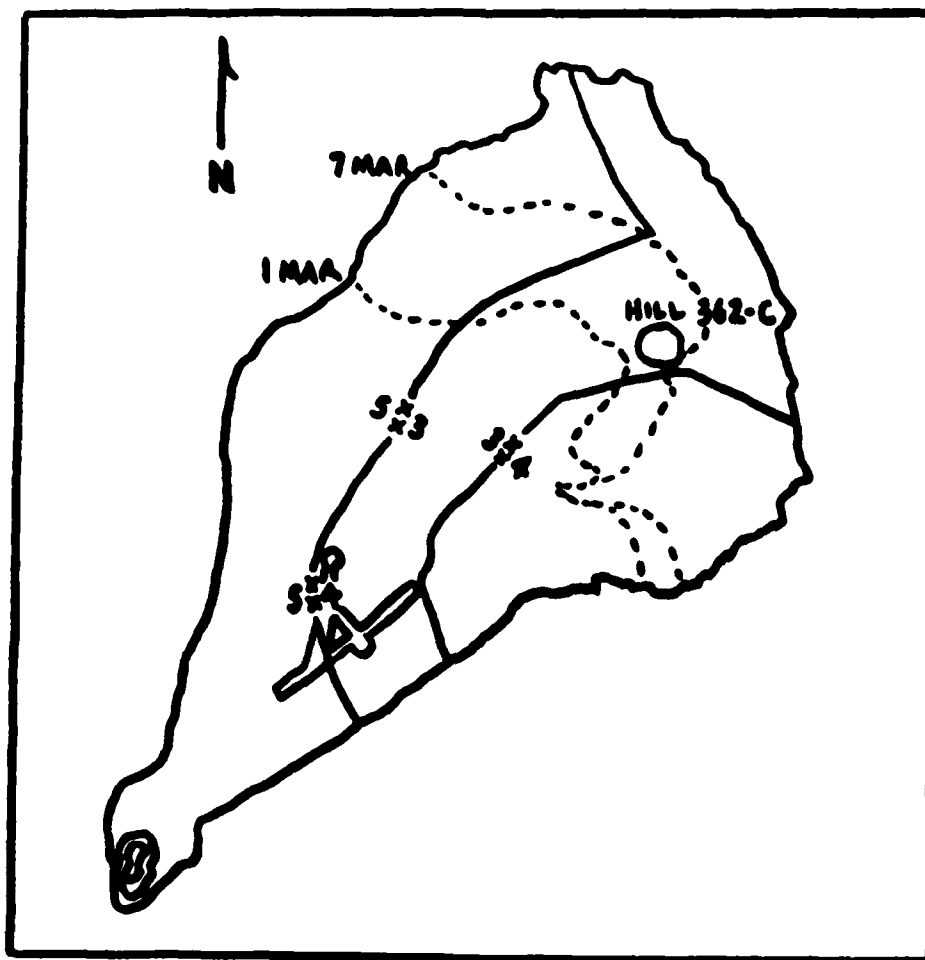


Figure 7 Progress of the Attack to the North



---

## BIBLIOGRAPHY

---

### A. REFERENCES CITED

#### Books

1. Bartley, Whitman S. Iwo Jima: Amphibious Epic. Washington, D.C.: U.S. Government Printing Office, 1954.
2. Josephy, Alvin M. Jr. The Long and the Short and the Tall. New York: Alfred A. Knopf, 1946.
3. Nalty, Bernard C. The United States Marines on Iwo Jima: The Battle and the Flag Raising. Washington D.C.: Historical Division, Headquarters, U.S. Marine Corps, 1970.
4. Newcomb, Richard F. Iwo Jima. New York: Holt, Rinehard, and Winston, 1965.
5. Smith, Holland M. and Finch, Percy. Coral and Brass. New York: Charles Scribner's Sons, 1949.
6. Snow, Donald M. and Drew, Dennis M. Introduction to Strategy. Maxwell AFB: Air Command and Staff College, 1983.
7. Wheeler, Richard. Iwo. New York: Lippencott and Crowell, Publishers, 1980.

#### Official Documents

8. U.S. Department of the Air Force. United States Air Force Basic Doctrine. AFM 1-1. Washington D.C.: U.S. Government Printing Office, 1984.

#### Other Sources

9. Map of the World. (Series 1150, Sheet 1). Defense Mapping Agency, 1980.

---

## CONTINUED

---

### B. RELATED SOURCES

#### Books

10. Gallant, T. Grady. The Friendly Dead. Garden City: Doubleday and Company, Inc., 1964.
11. Henri, Raymond. The U.S. Marines on Iwo Jima. New York: Dial Press, 1945.
12. Matthews, Allen R. The Assault. New York: Simon and Schuster, 1947.
13. Moskin, Robert J. The U.S. Marine Corps Story. New York: McGraw-Hill Book Company, 1977.
14. Toland, John. The Rising Sun. New York: Holt, Reinhart, and Winston, 1965.